INFANT MIND.

PROFESSOR SULLY'S STUDIES OF MENTAL EVOLUTION IN CHILDREN.

STUDIES OF CHILDHOOD. By James Sully, M. A., LL. D., Grote Professor of Mind and Logic, University College, London. Pp. viii., 527. D. Appleton & Co.

Memory brings up, on the perusal of this book, the figure of Sir Walter Scott, with his formula for all occasions when doting parents introduced him to the latest arrival in the nursery. With great deliberation, and an air of growing eagerness, he would peer into the youngster's face, at last intently exclaiming, "Well, that is a baby." He denied that in the course of years the sincerity of this remark had ever been questioned, or had even been answered with any such sneer as, "Why, of course it's a baby, you stupid." His conclusion was that humanity was too much absorbed in infant worship to be discriminating. But he was wrong about that. A rapidly increasing body of literature on the evolution of mind in childhood shows how the pride of parents in the beauty or bright sayings of their children may take a highly rational and scientific turn. A thoughtful book which recorded a great deal of original investigation was published last year ("Mental Development in the Child and in the Race"), by Professor J. M. Baldwin, of Princeton University. It is a rather curious psychological fact that little notice was paid to Professor Baldwin's book in American newspapers, while Professor Sully's book has received many attentions since the London newspapers set the fashion. Professor Baldwin's volume looked like the work of a specialist; Professor Sully adds to independent study a popular review of all that his predecessors, Baldwin included, have done; the English newspapers digest his work in a still more elementary form, and suddenly some Americans, who would not touch psychology per se with the tips of their fingers for fear they might seem to be dabbling in something learned, plunge into an encyclopaedic welter of science.

Professor Sully is not exactly fair with Professor Baldwin. The latter is no more dogmatic than several of the German and French authorities, whom the former quotes with the usual signs of respect which Englishmen always pay to the Old World and refuse to the New World, if possible. It is really the fault of the indicative mood, upon which, as we all know, Gibbon showered some precious maledictions, that one cannot make the English language just as tentative and cautious as one would like to make it in recording explorations upon a new field. It is really past belief that the Princeton professor overlooked the difficulties in the study of baby mind, which are so obvious to the eyes of the London professor. In Professor Baldwin's "optimistic presentment of the subject," says Professor Sully, "there is not the slightest reference to the difficult work of interpretation. Child study is talked of as a perfectly simple mode of observation, requiring at most to be supplemented by a little experiment, and, it may be added, backed by a firm theory." The American psychologist can reply safely that a theory restricted to the validity of the experimental method may well be firm, and that the difficulties of interpretation belong to a realm into which every scientist ventures, but where he never expects to stay until science itself is perfect. Men of science are very positive about the theory of evolution just now, but they might be persuaded to throw it aside, if a better scheme for arranging the facts of nature occurred to them.

As a matter of fact, Professor Baldwin made a distinct advance upon the methods of all his predecessors in the important matter of color distinctions. Professor Sully accepts the advance, but does not acknowledge his debt. He rightly declares that the problem is anything but the simple one it looks at first sight. The pioneer in attacking it was a German investigator, Professor Preyer, of Berlin, who "went to work methodically with his little boy of two years, in order to see in what order he would discriminate colors." But the child could talk already, and verbal associations were certainly mingled with the efforts, which resulted at length in his picking out yellow by way of his first definite answer to the questions put to him. M. Binet, of Paris, following Professor Preyer's method, found that his child selected blue. As against these investigators, Professor Baldwin raised the point that the name "blue" or "yellow" might fix itself in the child's memory before other similar words, and thus lead to a choice in which color was only a subordinate factor. He investigated the matter "by placing two colors opposite the child's two arms and noting which is reached out to by right or left arm, which is ignored."

All this, of course, long before the child could understand a question in words. He found that blue was most certain to attract the baby's attention. But he seems not to have given yellow a fair test, and the further objection of Professor Sully that the experiments reveal preference rather than discrimination is well taken. To have shown this preference as existent in babyhood at a time when the power of reaching after things is only beginning to be consciously exercised is a marked achievement in the study of mind, one of those to which all further effort must be secondary. It fixes the direction of future experiment in a clear and striking way.

The most salient thing in all this study for those who were children forty or fifty or sixty years ago will be the reminder that they themselves were guilty of an extraordinary number of things that would now attract scientific attention. Call to mind how the vigilant teacher in the Old Red Schoolhouse descended upon the budding genius whose slate was covered with drawings that had to be labelled "dog," "horse," "man," "woman," for the sake of recognition, and then study the pictures in this book. The forbidden pleasures of half a century ago have become veritable tests of mental evolution now. Even the infantile scrawls interpreted by the joyous little prattler as a picture of his dog, his kitten or his wooden horse, are scanned to detect the first signs of observation. As these art works of baby gradually attain a form recognizable to the mature mind, they are seen to show as much progress in seeing things as in the ability to handle the pencil.

The little child observes not the many characteristics of a thing, but some one thing which is impressive. It may forget that a dog runs on four legs while absorbed in the fact that the creature has a curly tail or a pointed nose. Professor Sully tells of one child who, having adopted "bow-wow" as the name for a dog, soon transferred the word to every object that ended in a point, for example, a fragment of bread or biscuit. The vividness with which the child perceives some single feature of an object often startles older persons. The latter attribute unconsciously to the little folks their own experienced perception, and then are struck by the acuteness which detects new points, as in the case of the little boy who observed at once a difference in the irons of two railways in Ireland. "We are all prone," says Professor Sully, "till by special training we have learned to check the inclination, to read far too much of our older thought and sentiment into children." This sharp yet restricted observation in childhood is the counterpart of the fact that the perceptions of mature persons are complex, so that the simplest objects mean much to one person and little to another; the yellow primrose, for example, that was much to Wordsworth and nothing at all to Peter Bell.

The child stands to man partly in the same relation that primitive man does to civilized humanity. Professor Sully takes delight in tracing parallels between mythology and the fancies of children. The savage and the child alike know of a world beyond their little horizon, but they love it too well to try to penetrate it. A distant chain of hills, the edge of a dark wood, the brink of a gloomy cave or pit, are often the boundaries of this unseen world. One little boy whom the author studied carefully peopled a certain tame bit of English forest with wolves, and realized in his own person many of those superstitious terrors which were once almost universal among grown people. The same boy when he came to believe in the existence of fairies settled them in the walls of his bedroom. "His fairy world was concocted from a medley of materials drawn from his observation of animals, his experience at the circus, including the ladies in beautifully tinted short dresses, whom, with childish awe, he named 'fairies,' and the book-lore that his sister was imparting to him from 'Stories of Uncle Remus' and other favorites." That is, nearly all his experience from the beginning up to near the close of his fourth year was embodied in his mythology. It was then that he put all these wonderful beings into the walls of his bedroom. About the same time he began to remember his dreams and to speak of them with the same conviction that a savage feels of the truth of his visions. The most impressive of these childish creations was, however, that of George Sand, who in her girlhood, when she devised a whole religion of her own, found her own temple in a thicket and raised an altar with her own hands. But this was hardly the untaught imagining of early childhood. Professor Sully has a study of considerable length on George Sand's early years, but the most significant features of it belong to the time after she had already betrayed her fondness for story writing.

If any one ever forms a satisfactory theory as to the origin of human speech, he will doubtless attain it by observing how children learn to talk. Baby language sometimes becomes quite varied and intelligible, though its vocabulary is different, it seems, with every new baby. The youngsters try a great number of shifts before they settle down to learn the words that older mortals use. One wonders at Italian babies being thus obstinate; while, on the contrary, the reluctance of English and American babies to enter the bewildering mazes of the English language seems the most natural thing in the world. Professor Sully's typical little boy, about the middle of his third year made a bold effort to conquer conditional clauses, one of the results being, "I think me better will" in reply to a caution against doing a certain thing, and another, "If him (a tree) would be small, I would climb up." At the same time he caught up sentences which attracted his attention and used them in his own way. Thus you have to imagine the little philosopher, when he heard some exaggeration, saying "Well, it might be different." But before he ventured upon English, he had a considerable language of his own, including a name for himself.

The inventions of some children in this way are elaborate. Professor Sully gives credit to Horatio Hale, the distinguished Canadian philologist, for special study of these spontaneous child languages, particularly in the case of "a little girl who at the age of two was backward in speaking, only using the names 'papa' and 'mamma,' and who, nevertheless, at that age, and in the first instance without any stimulus or aid from a companion, proceeded to invent a vocabulary and even simple sentence forms of her own, which she subsequently prevailed on an elder brother to use with her."

Professor Sully is generous in his treatment of what are called "children's lies." He does not sympathize with those cynical moralists who declare in their haste that all children are liars. He is too familiar with the freaks of imagination in children, with their dramatic impulses, and their love of illusion, not to set down much that seems untruth to older persons as true to the children in certain moods. The child loves to play at everything, even at being naughty. He boasts and feigns things that are not true in the pure spirit of romance. But the way is long from this sort of fiction to the real vice of lying, in which there is always a large measure of self-seeking, either in the way of favor or fear or malice. After looking at evidence on both sides of the case, Professor Sully "distinctly challenges the assertion that lying is instinctive in the sense that a child, even when brought up among habitual truth-tellers, shows an unlearned aptitude to say what he knows to be false." On the other hand, "a child's quick imitativeness will, of course, lead him to copy grown-up people's untruths at a very early age."

Again, children are not by nature wholly selfish. There are germs in them which may grow into cruelty, into indifference to pain and death. They are often callous in the sorrows of older persons, really because they cannot understand them. But sometimes even to a child barely able to talk, the death of another person comes as a revelation of loneliness and woe. The mere companionship of others evokes sympathy early. Childish imitation of another person's demeanor in trouble or suffering awakens the corresponding emotion. How early this feeling of sympathy is aroused, Professor Sully will not decide, but he gives an instance in a babe of fourteen months. "An elder sister, Katherine, aged six, who was working at a wool mat could not get on very well, and began to cry. Baby looked up and grunted, 'Ou! ou!' and kept drawing its fingers down its own cheeks. Here the aunt called Miss Katherine's attention to baby, a device which merely caused a fresh outburst of tears; whereupon baby proceeded to hitch itself along to Katherine with many repetitions of the grunts and mimetic finger movements. Katherine, fairly overcome by this, took baby to her and smiled; at which baby began to clap its hands and to crow, tracing this time the course of the tears down its sister's cheeks." The little one in this case certainly seems to have shown more than mere animal imitativeness. The quick change to smiles passes the power of mere instinct.

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